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# *Septobasidium hoveniae* sp. nov. and *S. rhabarbarinum* new to China

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Abstract —A new species, *Septobasidium hoveniae* on *Hovenia acerba* associated with *Pseudaulacaspis* sp., is described. *Septobasidium rhabarbarinum* on *Quercus pannosa* is new to China.

Key words —*Pucciniomycetes*, *Septobasidiales*, *Septobasidiaceae*, taxonomy

A new species of *Septobasidium* was discovered in the famous Huangshan Scenic Area. Owing to the mild and humid climate and plentiful rainfall, Huangshan Mountain is provided with a great biodiversity. Among *Septobasidium* specimens collected by the fourth author a new species was discovered and is described below:

**_Septobasidium hoveniae_** Wei Li bis, S.Z. Chen, L. Guo &Yao Q. Ye, **sp. nov.** Figs 1–4

Fungal Name FN570057

Differs from *Septobasidium henningsii* by its thinner hymenium.

Type: China, Anhui Province, Huangshan Scenic Area, Wenquan, alt. 640 m, on *Hovenia acerba* Lindl. (*Rhamnaceae*), associated with *Pseudaulacaspis* sp. (*Diaspididae*), 31.V.2012, Y.Q. Ye 5 (HMAS 252321, **holotype**).

ETYMOLOGY: The epithet refers to the substrate plant genus.

Basidiomata on branches, 10 cm long, 5 cm wide, cinnamon-brown; margin determinate, surface smooth, cracked at maturity, partly peeling off, emerging brown pillars. In section 600–1800 µm thick. Subiculum brown, 50–70 µm thick. Pillars brown, at first straight, later curved and confluent, and then

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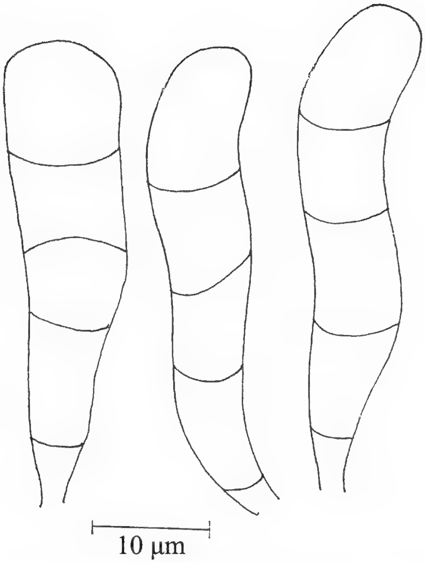

Fig 1. *Septobasidium hoveniae* (HMAS 252321, holotype). Basidia.

separable, 200–1500 µm high, 20–120 µm wide. Hyphal layer brown, 80–150 µm high. Hymenium hyaline or brownish, 100–110 µm thick. Basidia arising directly from the hyphae without a probasidial cell, cylindrical, straight or slightly curved, 4-celled, 35–45 × 7.5–9 µm, hyaline. Basidiospores not seen. Haustoria consisting of hyphae.

Comments: *Septobasidium hoveniae* is similar to *S. henningsii* Pat., which differs by having numerous fissures on the basidiome surface and a thicker and stratified hymenium, 60–400 µm high (Couch 1938).

***Septobasidium rhabarbarinum*** (Mont.) Bres., Annls. Mycol. 14(3/4): 240, 1916.
Figs 5–8

Basidiomata on branches, 2–8 cm long, 1–3 cm wide, cinnamon-brown or old golden; margin determinate, surface smooth, with numerous cracks at maturity. In section 320–700 µm thick. Subiculum brown, 20–30 µm thick. From subiculum forming brown hyphal layer, broken by channels at base. Hymenium stratose, brown or brownish, 140–150 µm thick. Basidia arising

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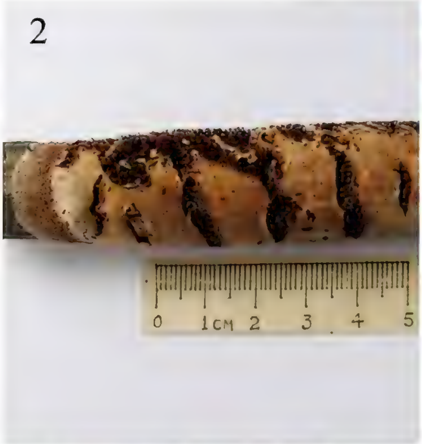
Figs 2–4. ***Septobasidium hoveniae*** (HMAS 252321, holotype). 2. Basidioma on branch; 3. Section of basidioma; 4. Basidium (arrow). Figs 5–7. ***Septobasidium rhabarbarinum*** (HMAS 251990). 5. Basidiomata on branches; 6. Section of basidioma; 7. Basidium (arrow).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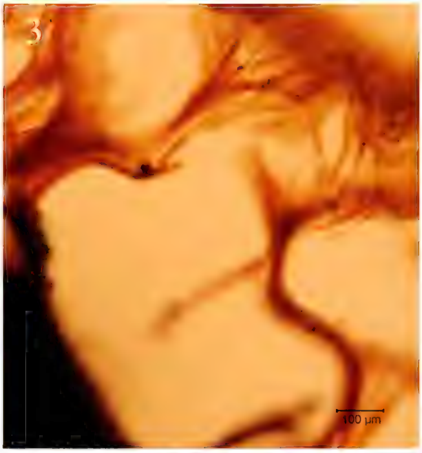
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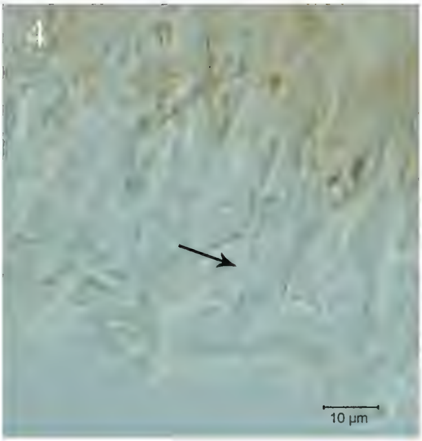
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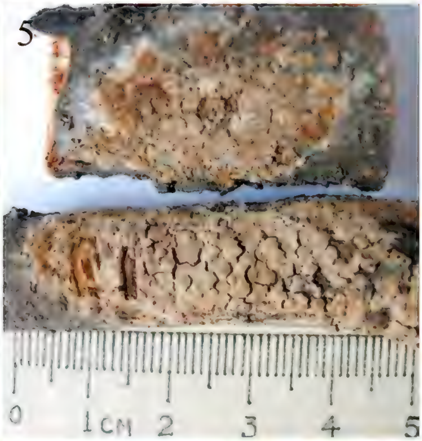
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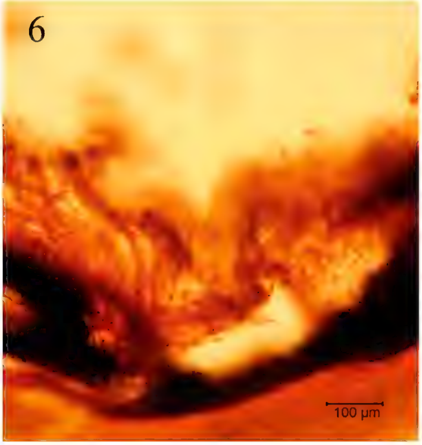
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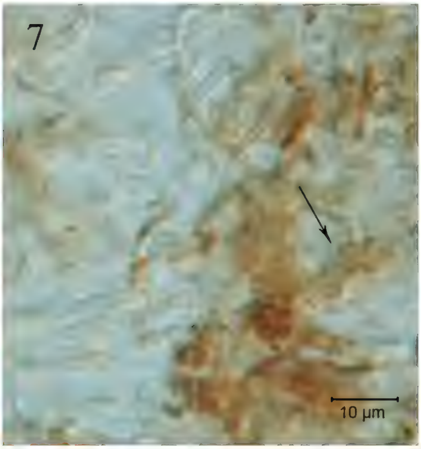
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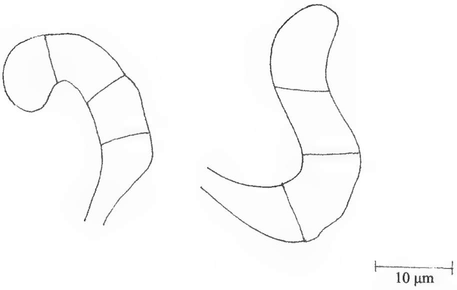

Fig 8. *Septobasidium rhabarbarinum* (HMAS 251990). Basidia.

directly from the hyphae without a probasidial cell, cylindrical, curved, 4-celled, 33–38 × 6–7 µm, brown. Basidiospores not seen. Haustoria consisting of irregularly coiled hyphae.

Specimens examined: **CHINA, Sichuan:** Yanyuan, Luguhu, alt. 2700 m, on *Quercus pannosa* Hand.-Mazz. (*Fagaceae*), 14. IX. 2010, Y.F. Zhu & L. Guo 342 (HMAS 251990), Y.F. Zhu & L. Guo 340 (HMAS 263425).

Comments: Our materials are much like *S. rhabarbarinum* described by Couch (1938), except that the basidia are shorter (33–38 × 6–7 µm vs. 50–68 × 6.3–7.1 µm).

Including the two species reported in this paper, 53 *Septobasidium* species have now been reported in China (Sawada 1933, Couch 1938, Teng 1963, Tai 1979, Kirschner & Chen 2007, Lu & Guo 2009a,b,c, 2010a,b,c, 2011, Lu et al. 2010, Chen & Guo 2011a,b,c,d, 2012a,b,c, Li & Guo 2013).

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## Literature cited

Chen SZ, Guo L. 2011a. *Septobasidium sichuanense* sp. nov. (*Septobasidiaceae*) from China. Mycotaxon 115: 481–484. http://dx.doi.org/10.5248/115.481

Chen SZ, Guo L. 2011b. *Septobasidium atalantiae* sp. nov. (*Septobasidiaceae*) and *S. henningsii* new to China. Mycotaxon 117: 291–296. http://dx.doi.org/10.5248/117.291

Chen SZ, Guo L. 2011c. *Septobasidium saurauiae* sp. nov. (*Septobasidiaceae*) and *S. pseudopedicellatum* new to China. Mycotaxon 118: 283–288. http://dx.doi.org/10.5248/118.283

Chen SZ, Guo L. 2011d. *Septobasidium glycosmidis* and *S. albiziae* spp. nov. (*Septobasidiaceae*) from Hainan Province. Mycosystema 30: 861–864.

Chen SZ, Guo L. 2012a. Three new species and three new Chinese records of *Septobasidium* (*Septobasidiaceae*). Mycosystema 31: 651–655.

Chen SZ, Guo L. 2012b. Three new species of *Septobasidium* (*Septobasidiaceae*) from Hainan Province in China. Mycotaxon 120: 269–276. http://dx.doi.org/10.5248/120.269

Chen SZ, Guo L. 2012c. Three new species of *Septobasidium* (*Septobasidiaceae*) from southern and southwestern China. Mycotaxon 121: 375–383. http://dx.doi.org/10.5248/121.375

Couch JN. 1938. The genus *Septobasidium*. Univ. of North Carolina Press, Chapel Hill. 480 p.

Kirschner R, Chen CJ. 2007. New reports of two hypophyllous *Septobasidium* species from Taiwan. Fung. Sci. 22(1,2): 39–46.

Li W, Guo L. 2013. Two new species of *Septobasidium* (*Septobasidiaceae*) from Yunnan Province in China. Mycotaxon 125: 91–96. http://dx.doi.org/10.5248/125.91

Lu CX, Guo L. 2009a. *Septobasidium maesae* sp. nov. (*Septobasidiaceae*) from China. Mycotaxon 109: 103–106. http://dx.doi.org/10.5248/109.103

Lu CX, Guo L. 2009b. Two new species of *Septobasidium* (*Septobasidiaceae*) from China. Mycotaxon 109: 477–482. http://dx.doi.org/10.5248/109.477

Lu CX, Guo L. 2009c. *Septobasidium annulatum* sp. nov. (*Septobasidiaceae*) and *Septobasidium kameii* new to China. Mycotaxon 110: 239–245. http://dx.doi.org/10.5248/110.239

Lu CX, Guo L. 2010a. Three new species of *Septobasidium* (*Septobasidiaceae*) from Gaoligong Mountains in China. Mycotaxon 112: 143–151. http://dx.doi.org/10.5248/112.143

Lu CX, Guo L. 2010b. Two new species of *Septobasidium* (*Septobasidiaceae*) and *S. pallidum* new to China. Mycotaxon 113: 87–93. http://dx.doi.org/10.5248/113.87

Lu CX, Guo L. 2010c. Two new species of *Septobasidium* (*Septobasidiaceae*) from Hainan province in China. Mycotaxon 114: 217–223. http://dx.doi.org/10.5248/114.217

Lu CX, Guo L. 2011. Two new species of *Septobasidium* (*Septobasidiaceae*) from Gaoligong Mountains in China. Mycotaxon 116: 395–400. http://dx.doi.org/10.5248/116.395

Lu CX, Guo L, Wei JG, Li JB. 2010. Two new species of *Septobasidium* (*Septobasidiaceae*) from southern China. Mycotaxon 111: 269–274. http://dx.doi.org/10.5248/111.269

Sawada K. 1933. Descriptive catalogue of the Formosan fungi. Part VI. Rep. Dept. Agric. Govt. Res. Inst. Formosa 61: 1–99.

Tai FL. 1979. Sylloge Fungorum Sinicorum. Science Press, Beijing. 1527 p.

Teng SC. 1963. Fungi of China. Science Press, Beijing. 808 p.